What is claimed is:

1. A system for gastric stimulation of a patient comprising:

a plurality of sensing electrodes for conveying sensed gastric electrical activity from a stomach wall of a patient to the stimulator;

an implantable gastric stimulator coupled to the plurality of sensing electrodes, the stimulator receiving the sensed electrical activity and determining whether to create an electrical stimulation based at least in part upon an analysis of the sensed gastric activity;

a plurality of stimulation electrodes for conveying the electrical stimulation from the stimulator to the stomach wall of the patient , the electrical stimulation for disrupting normal gastric activity of the stomach.

2. A system as recited in claim 1, further comprising one or a plurality of elongated lead body sheaths having proximal end connectors for coupling said stimulation and sensing electrodes with said implantable gastric stimulator, portions of said stimulation and sensing electrodes extending through the elongated lead body sheaths to their distal end, the distal end of the elongated lead body sheaths for electrical communication with the stomach wall of the patient and for positioning said stimulation and sensing electrodes on or in the stomach wall.

3. A system as recited in claim 1, wherein said plurality of the stimulation and sensing electrodes are positionable at different locations of the stomach wall.

4. A system as recited in claim 1, wherein the implantable gastric stimulator comprises a radio frequency telemetry transceiver provided for communication with said remote programmer.

5. A system as recited in claim 1, wherein said implantable gastric stimulator comprises a programmable microprocessor or microcontroller.

6. A system as recited in claim 1, wherein the stimulator may temporarily revert to a power conserve condition at programmable times of the day.

7. A system as recited in claim 1, wherein said sensing electrodes communicate the sensed gastric electrical activity to the implantable gastric stimulator for identifying interval, amplitude, and duration of the intrinsic electrical activity.

8. A system as recited in claim 7, wherein said sensing electrodes communicate the sensed gastric electrical activity to the implantable gastric stimulator for identifying the frequency spectrum of the intrinsic electrical activity.

9. A system as recited in claim 8, wherein the stimulator analyzes the electrical activity and classifies the electrical activity as slow wave or peristaltic wave.

10. A system as recited in claim 9, wherein the stimulator analyzes the intrinsic electrical activity and classifies the activity as normal or abnormal.

11. A system as recited in claim 10, wherein the stimulator may temporarily revert to a power conserve condition in the absence of a programmable threshold of normal electrical activity.

12. A system as recited in claim 11, wherein the stimulator delivery of electrical stimulation is triggered by electrical activity classified as normal events.

13. A system as recited in claim 12, wherein the stimulator is programmed to deliver electrical stimulation on all or a percentage of normal events.

14. A system as recited in claim 13, wherein the electrical stimulation is delivered across the intrinsic electrical activity.

15. A system as recited in claim 13, wherein the electrical stimulation is delivered with a spatial offset to the intrinsic electrical activity.

16. A system as recited in claim 13, wherein the electrical stimulation is delivered with a temporal offset to the sensed intrinsic electrical activity.

17. A system as recited in claim 13, wherein the electrical stimulation is delivered in anticipation of the next normal electrical activity.

18. A system as recited in claim 13, wherein the temporal offset is programmable by a user.

19. A system as recited in claim 13, wherein the temporal delivery of the electrical stimulation is adaptable based upon an algorithm considering a running history of recent predecessor electrical activity events.

20. A system as recited in claim 19, wherein the polarity of the stimulation electrodes is programmable by a user allowing stimulation between a single pair or a plurality of electrodes.

21. A system as recited in claim 20, wherein the stimulator is programmed by a user to switch the polarity of one or a plurality of the various stimulation electrodes to accommodate multiphase stimulation.

22. A system as recited in claim 21, wherein the electrical stimulation comprises one or a plurality of biphasic pulses programmable within the following parameters, comprising:

pulse amplitude between 0.0 to 15 V or 0.0 to 15 mA;

pulse width between 20 msec to 500 msec;

pulses per event between 1 and 5; and

first phase width between 25 to 100 percent of pulse width.

23. A method for claim 22, wherein the stimulator comprises an array and the pulse width is accommodated by switching between two or more capacitors in an array.

24. A system as recited in claim 23, wherein the electrical stimulation comprises an alternating polarity pulse train programmable within the following parameters, comprising:

pulse amplitude between 0.0 to 15 V or 0.0 to 15 mA;

pulse width between 100 μsec and 750 μsec;

pulses per second (frequency) between 10 to 120 Hz; and

duration of pulse train between 0.5 and 30 seconds.

25. A system as recited in claim 24, wherein the stimulator comprises a memory and the parameters comprising quantities, interval frequency, duration, and amplitude for the sensed events and quantities of paced events are stored in memory for subsequent recall.

26. A system as recited in claim 25, wherein the sensed intrinsic waveforms can be telemetered to the external programmer to assist in establishing the appropriate stimulation parameters.

27. A system as recited in claim 1, wherein the stimulator may incorporate one or a plurality of independently programmable stimulation or sensing channels.

28. A system as recited in claim 27, wherein at least one stimulation channel is programmable to parameters associated with nerve stimulation.

29. A method for gastric stimulation of a patient comprising:

sensing the intrinsic gastric electrical activity on the stomach wall of a patient;

determining when to apply electrical stimulation to the stomach walls of the patient based upon the sensed intrinsic electrical gastric activity;

forming an electrical signal in response to the determining; and

disrupting normal gastric activity of the stomach with the electrical signal.

30. The method of claim 29 further comprising maintaining a history of predecessor electrical events.

31. The method of claim 29 further comprising analyzing the electrical activity and classifying the electrical activity as slow wave or peristaltic wave.

32. The method of claim 29 further comprising analyzing the activity and categorizing the activity as normal or abnormal.

33. The method of claim 32 wherein the step of determining determines a percentage of normal events and step of disrupting applies the electrical signal for the percentage of electrical events.

34. The system of claim 32, wherein the step of disrupting is triggered by electrical activity classified as normal.